Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Currently Amended) A process for handling and stacking a plurality of thermoformed objects, which comprises the following steps:
- obtaining thermoformed objects each formed with at least three stacking protrusions or spacers having same space arrangement in arranged in a same pattern on the bottom of each thermoformed object, at least one stacking protrusion or spacer of a same thermoformed object being located in such a way as to be out of symmetry with respect to other stacking protrusions with respect to at a centre line (m-m) a non specular symmetric way with respect to at least a centre line of the respective thermoformed object and at a distance from the same centre line different from that of the other protrusions or spacers,
- arranging one of said thermoformed objects on a in at least one support template to keep them in order-according to the space arrangement,
- rotating every other thermoformed object by a predetermined angle before or during [[a]] their transfer to a stacking station, and
- stacking the thermoformed objects with alternate thermoformed objects rotated by said predetermined angle to obtain stacks of thermoformed objects, [[where]] wherein the stacking protrusions of a thermoformed object are offset with respect to those of the next thermoformed object in each stack.
- 2. (Previously Presented) A process according to claim1, wherein the the step of turning the thermoformed objects includes picking up thermoformed objects from a supporting template, turning the thermoformed objects about a vertical axis, while the thermoformed objects are lifted, and

placing the thermoformed objects rotated through the predetermined angle on the same template or on another template loaded with thermoformed objects that have not been turned.

- 3. (Previously Presented) A process according to claim 1, wherein the thermoformed objects are rotated through an angle of 180°.
- 4. (Withdrawn) A plant for handling and stacking thermoformed objects having at least three projections acting as stacking spacers, at least one of which is arranged at non specular symmetry with respect to at least a centre line of the respective thermoformed object, said plant including a receiving station for a thermoformed object, at least a handling station for said thermoformed objects, a stacking station for said thermoformed objects, means of transferring the thermoformed objects from the receiving station to the stacking station through each handling station, wherein at least one of the handling stations includes handling means arranged to rotate by a predetermined angle about a vertical axis all thermoformed objects before or during their transfer to said stacking station, thereby obtaining stacks of thermoformed objects, where the stacking spacers of one thermoformed object are angularly offset with respect to those of the next thermoformed object.
- 5. (Withdrawn) A plant according to claim 4, wherein said handling means comprises a support structure and a head unit for picking up samples of thermoformed objects, which are rotatably supported and can be lifted and lowered on said support structure.
- 6. (Withdrawn) A plant according to claim 5, wherein said head unit comprises a support member rotatably mounted around a vertical axis on said support structure, a multiplicity of spacers carried by said support member and extending downwards, and a holding means carried by each said spacer and spaced apart with respect to the remaining holding means according to the configuration of the thermoformed objects transported by said transfer means.

- 7. (Withdrawn) A plant according to claim 6, wherein said holding means includes suckers.
- 8. (Withdrawn) A plant according to claim 6, including a geared motor unit for controlled rotation of said support member.
- 9. (Withdrawn) A plant according to claim 6, wherein said support structure includes a fixed support, an overhanging arm having one end thereof slidably mounted along at least one vertical guide on said fixed support, and drive means to cause said overhanging arm controllably to lift and lower.
- 10. (Withdrawn) A plant according to claim 6, wherein said handling means includes a robot (60) having at least an overhanging arm (15) mounted for rotation either around a horizontal axis to carry out raising –lowering movements for said support member (19) or around a vertical axis to transfer mouldings of thermoformed products (2) away from said transfer means (5,50).
- 11. (Withdrawn) A plant according to claim 10, wherein said robot comprises drive means (62) and guide means (65) to carry out movements from and to said handling station (6).
- 12. (Withdrawn) A plant according to claim 4, wherein said handling means include at least a support template (9a-12a) for a moulding of thermoformed objects (2), a support frame (39-42) carried by said transfer means (5,50) for each support template (9a-12a) and having a circular opening at which a respective template (9a-12a) is rotatably mounted, and drive means for causing said template (9a-12a) controllably to rotate upon control.
- 13. (Withdrawn) A plant according to claim 4, wherein said transfer means comprises at least one rotating conveyor (5) with a plurality of arms (9-12).

- 14. (Withdrawn) A plant according to claim 4wherein said transfer means comprises at least one linear conveyer (50).
- 15. (Withdrawn) A plant according to claim13, comprising a single station thermoforming press(31) with cut and form mould (32) having a suction plate (30) for picking up thermoformed objects (2) thermoformed therein and arranged to discharge mouldings of thermoformed products (2) at said receiving station (3).